

THURSDAY, AUGUST 13, 1874

ICELAND'S MILLENNARY

ANNIVERSARIES are nearly as old as history, and are of constant occurrence ; centenaries are of comparatively modern date, but have been not infrequent during the past thirty years ; a millenary, however, must not only necessarily occur with extreme rarity, but there are many chances that in a thousand years an event which was long held of the greatest moment may be looked back upon with comparative indifference, may have dwindled into comparative insignificance, as seen from a new point of view or in the shadow of some more stupendous occurrence ; or the individuality, whether a nation or a widespread association, in whose career the event was held to be of prime importance, may have become either extinct or absorbed in some wider individuality, which may not be so impressed by the memory of the episode as to be moved to celebrate its millenary. The Icelanders then have reason to congratulate themselves that they have kept their individuality intact for so long, as to be now celebrating the 1,000th anniversary of their origin as a distinct and separate community.

It will be found on examination that men keep alive the memory, by festival or otherwise, of any event because that event marks the beginning or the renewal of life in an individual or a community. There are many events in the history of individual nations and of the world which might thus very appropriately be annually or centennially remembered ; there are not a few occurrences in the history of our own country that well deserve such a commemoration on account of the new impulses they gave to our national life and our intellectual progress, as well as indirectly to the advancement of the world at large. We believe that, on the whole, this periodical celebration of the occurrence of events which mark certain stages in the progress of a community or of the world serves a good purpose and ought to be encouraged ; it affords us an opportunity to take stock of our gains, to measure the extent of our progress, to see wherein we have erred and how we ought to mend our ways ; and last, but not least, it gives the world an excuse for learning something about the important events which have marked its history.

This celebration of the 1,000th anniversary of the colonisation of Iceland ought to excite the interest of a wider circle than the few thousands who fondly cling to the bleak but picturesque Arctic outpost which has been the home of themselves or their ancestors for a thousand years, and where they have maintained stereotyped, as it were, the physiognomy, dress, and manners of a people that were at one time rulers of the sea and very nearly lords of all Europe. It would be an interesting task to investigate the causes which have brought it to pass that a people at one time so overflowing with energy as the old Norsemen, should for some centuries now have been justly regarded as the most peaceable, industrious, and most home-keeping people in Europe. As everyone knows, for about 200 years from about the middle of the eighth century A.D. the Norse rovers, the "vikings," the men of the viks, voes, or bays, were to be found on almost every sea of Europe, rousing

to activity or over-mastering the exhausted southern nations. It was no doubt good for our own land that it should receive such a large infusion of this energetic northern life, as it did, first in the shape of Danish invaders and settlers, who have left a broad mark on the northern counties of England, the south and north-east and west of Scotland, and again in the shape of the Normans who shed themselves over the land under the leadership of Duke William. These Norsemen, one of the branches of the great Teutonic kin, seem to have taken kindly enough to the wild, roaming life of sea-rovers, and hardy indeed they must have been to weather the hazards of the sea in such craft as they then could command. But, after all, it should be remembered that even in the eighth and ninth centuries Europe had not quite subsided from the commotions which followed on the coming in from the east of the great Teutonic wave, and as the Scandinavian offshoot was probably one of the latest to reach its destination, the great northern peninsula, we need not be surprised that it was one of the latest to settle down to a quiet and home-keeping life ; it did so only after sending out wavelets in all directions, east and west and south, which wavelets produced impressions that have continued for good even until now. As seen in the stories, historical and legendary, that come down to us, these hardy Norsemen of yore were a glorious race of men, half barbaric as they were, full of the greatest capabilities and a splendid energy, to the infusion among us of which we ourselves are no doubt indebted to a considerable extent for the capacity which has enabled us to attain such large intellectual and material achievements, and for that never-subdued love of liberty which in all directions has been so fruitful in results.

Even in Iceland, cut almost entirely off as it has been since its colonisation from the influences that have stirred and moulded the rest of Europe, the fine energy of its Norse Colonisers has by no means died out. Yet this old Norse Colony cannot be said to have advanced much beyond the standpoint it occupied a thousand years ago. The Icelanders have no doubt produced much literature that must be of permanent value both intrinsically and as an all-important aid to the scientific student of language and of the human race. Still they must, we fear, be looked upon as a thousand years behind the rest of Europe, and a study of their present condition will afford an excellent means of estimating the immense advances which the civilised world as a whole has made during the last thousand years. And to what is this advance owing ? Is it not simply that in Europe generally, knowledge has been spreading in an increasing ratio, and that our knowledge has been becoming more and more scientific ? Would not a survey of the nations of the world show us that those nations in which science is cultivated to the highest possible extent alongside of other fields of intellectual activity, are the nations which hold the front rank in the march of the world's progress ? In short, it will be found, we believe, that the world's progress and science are almost convertible terms. But science to be of any practical utility requires something to work with, and that something in the case of our own nation is Coal. The student of history ought to bear this in mind, and thus he will see that in Iceland, however far theory might have

gone, geology would for ever have forbidden any great national advances as depending on science. Here is a tremendous thought for our statesmen and political economists. England without science would have been in the position of Iceland without coal!

The early visitors to Iceland are said to have found traces of former visitors in the shape of books, crosses, bells, &c., which it is supposed may have been left by monkish voyagers or fishers from Ireland, which at that time was pre-eminent in Europe for its learning. And this learning was the secret and the reason of Ireland's early pre-eminence; and it is only by the spread of education and by bringing the people under the influences which have done so much for the rest of Europe, that she can ever regain the position she once so proudly occupied. The Icelanders, on the other hand, seem to have improved as far as their opportunities have allowed them; but these opportunities have been comparatively few and unimportant. Now, however, that Denmark is handsomely to grant the island a reformed constitution, and that the eyes of the civilised world at large have been attracted to it, we hope Icelanders will be led to develop, by means of education and scientific knowledge, their own latent capacities as well as the capacities of their island home, which, like themselves, seems as if it were the "fragment of a former world." It is almost too trite to say that it is wonderful what human energy will accomplish under the most adverse circumstances when directed by scientific knowledge and stimulated by the encouragement and the hope of the approval of our fellows. And if the Icelanders generally had among them the opportunities of bringing themselves abreast of the rest of the world as far as education is concerned, and especially in respect to a knowledge of the methods and results of science, if even a very few of the permanent inhabitants became competent observers of nature, might we not rationally look for results that would shed considerable light on various important points in science—in geology, for example, and meteorology—that are waiting to be cleared up? Iceland, indeed, might very well become the world's polar observatory. Let us hope that this new episode in the history of Iceland may be productive of widespread and lasting benefit to the people themselves, and lead to an increase of the general sum of intellectual progress; and all peoples who can in any way claim to a Norse connection ought to sympathise with their old-fashioned brethren in their rejoicings, and lend them a helping hand to enable them to partake of the many good results which Norse energy has helped to achieve. Their quaint old Sagas, we are sure, would not give less pleasure during the dreary nights of their long winter, if told to an audience whose resources of rational enjoyment have been increased by a knowledge of "the fairy tales of science, and the long results of time."

The Icelanders themselves have good reason to remember the period of the colonisation of their wild island, for it was carefully planned and judiciously carried out a thousand years ago, and obtained effectually for its originators that freedom which they were in great danger of losing under the tyranny which then oppressed their native Norway. And here we may state, as a curious fact, that the millenary festival of the establishment of the kingdom of Norway itself took place only two years ago.

That, and the festival of which we speak, are, so far as we know, the only celebrations of the kind that have hitherto been kept.

It was about the year 861 A.D. that Iceland was first seen by the Norsemen; the story being that in that year one Naddod, a vikingr, a leader of one of the then frequent plundering expeditions, was driven by a tempest on the eastern coast of this then unknown country, to which he very naturally gave the name of "Snjóland." No doubt Naddod would tell the story of his accidental discovery to his own folk when he returned home from his roving expedition, and it was possibly this story that instigated Gardar, the Swede, whose home was in Denmark, to visit the new-found land.* This Gardar seems to have found a good harbour near the present Austerhorn, where he wintered, and in the following year completed the circumnavigation of the island, which he renamed after himself "Gardarsholm." The next visitor to the yet uninhabited island is said to have been a "mickle" Norwegian vikingr, Floki "Volgertharson," who struck the east coast a few years after Gardar, and sailing south and west landed at Vatna Fjord in Bardestrand. Floki explored the country to some extent, and would have settled therein with his followers had not their cattle all died. He, however, appears to have passed a second winter at Hafna Fjord, returning home in spring full of information concerning the new land, which, the chronicles say, was at that time covered with wood, and otherwise more inviting than it is at the present day. Indeed, one of Floki's companions is said to have given quite a glowing account of the country; the very grass, he said, "dropped butter." From the large quantities of drift-ice which he found in the northern bays, Floki gave the island the name by which it has been ever since known—Iceland.

By this time the overbearing conduct of the Norwegian king, Harold Haarfager, had so galled his high-spirited nobles that to many their country had become intolerable, and they were quite ready to welcome any chance of escape from their monarch's oppressions. Love and murder, however, seem to have been the immediate causes of the first deliberate emigration from Norway of a band of colonists for Iceland. Ingolf and Leif, the story goes—and we believe its main features may be relied on as authentic—were two cousins, whose fathers had been obliged to fly from their native province for murder. Ingolf had a beautiful sister, Helga, whom Leif loved, but she was also loved by Holmstein, one of three sons of a powerful Norwegian noble, who were companions of Ingolf and Leif in their piratical excursions. Leif married Helga, and had therefore to meet Holmstein in mortal combat, when the latter was done to death. This and other occurrences made Norway too hot to hold the two cousins, who, indeed, had been condemned to banishment. After two piratical trips to Ireland, from which they returned with great booty, the cousins with their families and friends and Irish slaves, their goods and their chattels, bade farewell to their native land in the year 874 to found a republican colony in Iceland. Ingolf was first forced to land on a promontory on the south-east coast, which was hence named Ingolfshöfde, where he

* But according to the table in Rafn's "Antiquitates Americanæ," it was Gardar who discovered Iceland in 860.

remained three years, at the end of which time he removed to the site of the present capital, Reikjavik ("Reeky Bay"), where superstition apparently determined him to remain, notwithstanding the remonstrances of his servants, who had seen many more inviting spots along the coast. Meantime Leif, or Thorleif as he was now called, from a big sword he brought back with him from Ireland, had built his house at Thorleifshöfde, where, in the first spring after his arrival, he began to cultivate the ground. Having only one ox, however, the story goes, he compelled his Irish slaves to draw the plough; they thereon rebelled and murdered their master, they themselves being in turn pursued and nearly all killed by Ingolf, who then appropriated all the country between the river Olousa and Hval Fjord. The oppressions of Harold the Fair-haired soon sent many of the best of Norway's sons to become settlers in the new colony, and thus it was that Iceland was peopled, not by the scum of the mother country, as is too often the case, but by the best blood of old Norway. This influx of colonists continued for sixty years, when, the causes of emigration from Norway having ceased, and the best ground in Iceland having been fully occupied, immigration gradually came to an end.

From the first the colonists seem to have set themselves to make the best of their not very promising surroundings, and ere long to have settled down into a comparatively peaceful and contented community. One Ulfleet is said to have compiled a code of laws, and instituted the "Althing," or National Assembly, in 928, when for the first time it met at Thingvalla. Among other enactments pauperism was suppressed as a crime by the severest laws, one of which was intended effectually to prevent the procreation of a pauper class in a country where it was only by dint of the hardest labour that the sea and the land could be made to yield enough for all. The colonists were converted to Christianity about the year 1,000; in 1261, after many internal contests, the whole island swore allegiance to the Norwegian king, but about 1387 it was transferred to Denmark, attached to which kingdom it has ever since remained. The King of Denmark is now on the island—an event of the rarest occurrence—and, as we have said, is to grant to his Icelandic subjects a new and liberal constitution; we believe he is accompanied by Prof. Steenstrup.

This, deprived of detail and of much that is doubtful—though the Icelanders have less of the legendary in their early history than most other old countries—is the story of the colonisation of Iceland a thousand years ago. We have not space to enter into further detail concerning the physical aspect of the island, the character and customs of the people, their wonderful literature in all departments of intellectual activity, their discovery of and long intercourse with Greenland and North America. Greenland was seen by an Icelander, Gunnbjorn, so early as 877, and for centuries after some rocks between Iceland and Greenland were known as "Gunnbjorn's Skerries." Erik Rauda ("the Red") first visited Greenland in 983; three years afterwards he planted a colony on the south-west coast. We understand that a deputation from America is attending the millenary fêtes now being held in Iceland, and that some of the American scientific societies have shown their good

will by sending valuable presents of books, &c. This is right and becoming on the part of the Americans, for, as we have just indicated, the Icelanders were the first European colonists of America, and had regular intercourse with the western continent for about 300 years; and it is curious to conjecture what might have been the history of that continent had the Norse attempts at colonisation not proved abortive. It is by no means improbable that Columbus himself, when he made that northern voyage in 1467, "a hundred leagues beyond Thule," may have heard some fragmentary traditions of the Greenland colony which he may have treasured in his heart as a confirmation of the idea which was subsequently to bear so rich fruit.

The history of this old Norse colony proves that the people have great capacity for work, and we again hope that this celebration of the courage and dauntless energy of their forefathers will be the means of rousing them to renewed activity, which will be beneficial both to themselves and to the world at large, which has increasing need of all the really good working power it can command.

RECENT RESEARCHES IN PHOTOGRAPHY

A SUBSTANTIAL contribution has been recently made to our knowledge of the action of light upon silver salts—a contribution which we cannot but consider as of the highest importance to photography, both as a science and as an art.

In the autumn of last year Dr. Herman Vogel announced * as the result of some experiments that he had been making, that "we are in a position to render bromide of silver sensitive for any colour we choose—that is to say, to heighten for particular colours the sensibility it was originally endowed with." This discovery is such a decided advance that it will be interesting to trace it from the beginning. Dr. Vogel, in the first instance, found to his astonishment that some dry bromide plates prepared by Col. Stuart Wortley in this country were more sensitive to the green than to the blue portions of the spectrum. This result was so totally opposed to the generally received notions that the subject was submitted to further examination. In the next experiments a comparison was instituted between dry bromide plates and the same plates when wet from the bath solution of silver nitrate. The results showed a decided difference in the behaviour of the plates. The sensibility of dry bromide plates appears to extend to a greater extent into the least refrangible end of the spectrum than is the case with wet plates. In Dr. Vogel's plates, in fact, which received the spectrum formed by the battery of prisms of a direct vision spectroscope from a ray of sunlight reflected from a heliostat and passing through a slit 0·25 mm. wide, the photographic impression of the spectrum, when developed by an acid developer, extended in the case of the dry plates into the orange, but with wet plates not quite into the yellow. The bromide plates prepared by Vogel, moreover, did not exhibit that increased sensitiveness for the green rays which characterised Col. Stuart Wortley's plates, and this led the German investigator to conjecture that the latter plates contained some substance which absorbed the green to a greater extent than the blue. To test this

* *Poggendorff's Annalen*, vol. cl., p. 453.